

Round Table meeting Discussion

ECTI and Round Table meeting, August 21-26, 2023

Location ECTI: Footprint Cafes, SiemReap, Cambodia

Location Round table meeting: Sala Siem Reap Hotel, SiemReap, Cambodia

Round table Speakers :

1. Prof. Hamed Yahoui, Project manager of Factory 4.0
2. H.E. Dr. Hul Seingheng, General Director of GDSTI, Representative from the Ministry of Industrial, Science Technology, and Innovation
3. Mr. Rath Sara, Director of the Vocational Orientation Department, Representative from the Ministry of Education, Youth and Sport
4. Mr. Phoeurn Phally, CEO of VP Start Technology Co., Ltd, Representative from Ford Cambodia company
5. Mr. Virote Sawangchange, General Manager of RMA Automotive (Cambodia) Co., Ltd (Ford Assembly Plant)

On 25 August 2023, we held a round table meeting to discuss the current status of PLC and the point of view regarding integrating PLC into the curriculum to meet the required Industry 4.0 at Sala Siem Reap Hotel, **Figure 15**.



Figure 15. Round Table meeting at Sala Siem Reap Hotel 2023

Figure 16 shows the inviting speaker to discuss the point of view of Industry 4.0 in Cambodia. We have invited many speakers from ministries and companies with titles as shown below:

- Mr. Phoeurn Phally, CEO of VP Start Technology Co., Ltd, Representative from Ford Cambodia company (left side)
- Mr. Rath Sara, Director of the Vocational Orientation Department, Representative from the Ministry of Education, Youth and Sport
- H.E. Dr. Hul Seingheng, General Director of GDSTI, Representative from the Ministry of Industrial, Science Technology, and Innovation
- Mr. Virote Sawangchange, General Manager of RMA Automotive (Cambodia) Co., Ltd (Ford Assembly Plant) (at last right side)



Figure16. Round table meeting in Siem Reap Cambodia, 2023

Moreover, not only the speaker but also the attendant from the ASEAN Factori 4.0 partners universities such as Bulgaria, France, Thailand, Lao, and Cambodia. Figure 4.2 shows the attendant list of people who joined the round table meeting in Siem Reap Province in Cambodia.

H.E. Dr. Hul Seingheng, General Director of GDSTI, responds to a question about the current status of Industry 4.0 in Cambodia. He acknowledges the significance of the industrial, trading services, and agriculture sectors in the country. He rates the current level of Industry 4.0 in Cambodia as around 1.9 or 2 on a scale of 1 to 5, with 1 being the lowest and 5 the highest. He notes that while the risks and technologies associated with Industry 4.0 are relatively new and

somewhat more sophisticated, there is growing development in the agricultural sector. He emphasizes the importance of implementing Industry 4.0 in agriculture.

According to H.E. Dr. Hul Seingheng, there are significant problems in terms of human resources, infrastructure, and policy infrastructure that must be addressed before Industry 4.0 can be implemented in Cambodia. These challenges are seen as arising from upstream to downstream. From a governmental perspective, our ministry's goal is to write a book on the current state of industrial 4.0, but since it is happening too quickly, we have shifted our focus to industrializing Cambodia. In the Asian framework, I co-chair the Science and Technology Evaluation Committee and represent Cambodia. As part of their joint initiative in Asia, Cambodia has suggested that Industrial 4.0 be prioritized in the education sector.

We expect our young generation to be ready in terms of technology and things to be done in education when they are ready to integrate into the private sector and global market. Research and development in the areas of automation, electronic industry, cloud-based services, digital health, and the other five industries will be highly valued in 2030. He said that the government will establish an international research center in the future with ongoing funding to gradually raise the GDP percentage by 1% by 2030. We expect our young generation to be ready in terms of technology and things to be done in education when they are ready to integrate into the private sector and global market. Research and development in the areas of automation, electronic industry, cloud-based services, digital health, and the other five industries will be highly valued in 2030. He said that the government will establish an international research center in the future with ongoing funding to gradually raise the GDP percentage by 1% by 2030. As part of our strategy, we anticipate that R&D will be helpful in the case of technology transfer, as it can be hard to share research discoveries with the private sector. These tactics will assist developing countries like Cambodia in this regard so that we, the employees, are ready for the modern technology that wealthy countries wish to invest in our country. All of the technology and abilities remain with us even after the project or investment finishes.

Mr. Rath Sara, Director of the VOD, provided a positive remark that is possible make collaborate between VOD and Universities to upskill teachers from technical high schools, training of high school students at an advanced level, or other possibilities. He stated that not only between high school and university but needs to cooperate with the private sector as well. So there are in terms of capacity development and exposing what the student learns in school and applying it in real-

world practice. Regarding capacity development needs to take into account human resources and materials. Moreover, he also mentions that VOD also reforms which focus on making partnerships as well. And during the panel discussion, H.E. Dr. Hul Seingheng mentioned that Cambodia depends on 3 main sectors including agriculture, manufacturing, and service. Currently, agriculture might apply more advanced technology and for service and trade are also applying advanced technology as well. However, for manufacturing in Cambodia, we are a little bit too far behind industry 4.0. To respond to the question of how the Ministry to facilitate a regulatory environment that encourages innovation and collaboration between academia, industry, and government in the implementation of Industry 4.0, especially new automation technologies, he points out Pillars of Cambodia's Economic Reforms. He states that there are five Pillars of Cambodia's Economic Reforms including 1) Government, 2) Human capital: which needs smart people, with healthy and long lives, 3) Collaboration, 4) Partnerships, and 5) Building the ecosystem to ensure that the innovation is there. Moreover, he also emphasizes that building the research requires a strong university, strong education, a mutual recipe, Strong government policy, and a foundation structure. Regarding the point of view on curriculum modification to prepare the students to get the right competencies due to the penetration of the digital world in the factory in our domain, there are ideas from both the Ministry of Industry and the Ministry of Education. They are pointing out that hard skills and soft skills are still needed. And required to apply a proper methodology, and do more research in terms of marketing needs. The curriculum might be more realistic and acceptable which means students are ready for it. Schools should provide more practice to students. During the round table discussion, we got positive responses from the companies that they can Center of Excellence to benefit all together regarding cooperation in finding the solution for the company. It means that we can start from a small consultancy service, and find the solution that industry facing to build trust between the university and industry so that we can see the potential of cooperation. We need a self-research and collaboration. Moreover, Mr. Virote Sawangchange, General Manager of RMA Automotive (Cambodia) Co., Ltd has added that the company needs students who are full of knowledge of basic foundation and high level which can integrate and diversity, so we can share instrument in terms of cooperation. Mr. Virote Sawangchange suggested to us the association of automotive in the ASEAN region like the automotive sector and Credit Bureau Cambodia (CBC). We have to work together with the private sector, government, and university to support the university regarding regular internship and team development.

